



RANGE RESOURCES

June 3, 2009

Mr. Vince Yantko
Pennsylvania Department of Environmental Protection
California District Office
25 Technology Drive
Coal Center, Pennsylvania 15423

Dear Mr. Yantko:

Subject: Incident Report
Range Resources – Appalachia LLC
Cross Creek County Park Well Nos. 14H, 15H, and 16H
Well Permit Nos. 37-125-23165-00, 37-125-23182-00, and 37-125-23300-00
Hopewell Township, Washington County, Pennsylvania

Range Resources – Appalachia, LLC (Range Resources) is submitting this letter as an incident report regarding the spill incident that occurred at the Cross Creek County Park Well Nos. 14H, 15H, and 16H in Hopewell Township, Washington County, Pennsylvania. The Cross Creek County Park Well Nos. 14H, 15H, and 16H are permitted by the Pennsylvania Department of Environmental Protection (PADEP) Bureau of Oil & Gas Management under Permit Nos. 37-125-23165-00, 37-125-23182-00, and 37-125-23300-00, respectively. This submittal contains the following information regarding the incident:

- A description of the incident, including the cause of the incident and notifications that were made;
- Actions taken to contain the release;
- Actions taken to recover the spill; and
- Actions to be taken to prevent a similar incident in the future.

Description of Incident

On May 26, 2009, Range Resources was pumping flowback water from the hydraulic fracturing (fracing) of the three wells. The water was being conveyed through a 6-inch diameter high density polyethylene (HDPE) pipe from the well locations to the Lowry impoundment. The Lowry impoundment is permitted for the collection/storage of flowback water by the PADEP with a Dam Permit for a Centralized Impoundment Dam at Marcellus Shale Sites (Permit No. DOG6309-001).

The majority of the HDPE was welded using a fusion welder. However, 3 sections of HDPE pipe were connected via bolted, flanged couplings. Couplers were used in this location so that

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the piping could be installed in the culvert under the temporary access road to the Hamilton farm pond. All piping was put in place and the couplings were connected. Then, prior to pumping fluid through the HDPE pipe, the pipe was pressure tested to 100 pounds per square inch (psi) to ensure that the couplings were properly installed and there were no leaks in the pipe. A copy of the records from the pressure testing of the pipe is included with this submission. These records show that the pressure was held for 30 minutes with no drop in pressure, indicating that there were no leaks in the pipe at that time.

At approximately 1:30 pm, a Range Resources contractor was walking the pipeline and discovered a leak at 2 of the couplings. The leak was approximately 500 feet from the location of the 3 wells, just below the Hamilton farm pond. At that time, notification was made to the appropriate Range Resources employees who immediately responded to the location to assess the incident and respond. He also made notification to additional Range Resources employees for response purposes.

Range Resources personnel immediately shut down the flowback operation when the leak of flowback water was discovered. Upon further investigation, Range Resources personnel determined that the water had leaked from the pipe at the location of 2 of the couplings due to the fact that 3 of the bolts for each of the couplings were loosened. Range Resources was unable to determine how the bolts, all on the underside of the couplings, were loosened. Due to the loose bolts, the water leaked, pooled in a low spot of the existing ground surface at the location of the leak, and then flowed via overland flow into an unnamed tributary to Cross Creek. When Range Resources personnel had assessed the situation, DEP personnel were then notified via telephone at approximately 5:15 pm. The attached photographs show the location of the leak.

Actions Taken to Contain the Release

Upon discovering the incident, Range Resources personnel immediately took steps to attempt to contain the release. The flowback of the well was immediately shut down so that no more flowback water would flow through the pipe. Additionally, several check dams were constructed in the unnamed tributary to Cross Creek in an attempt to prevent the flowback water from being conveyed downstream to Cross Creek and Cross Creek Lake. The couplings on the pipeline were then tightened to eliminate any future potential for leaks. The remainder of the flowback water was then trucked to the impoundment location for collection/storage instead of pumping through the pipeline to prevent any additional incidents from the piping.

Actions Taken to Recover the Spill

Flowback water that was contained by the check dams installed in the unnamed tributary was pumped out by a vacuum truck in locations that were accessible. Additionally, any soil affected by the spill of flowback water was excavated from the area and placed in three lined dumpsters on site. Sampling and analysis of the soil in the dumpsters will be performed to determine the final disposition of the soil. The entire area of disturbance was immediately seeded and mulched. The attached photographs show the area following soil removal and seeding and mulching.

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Actions to be Taken to Prevent a Similar Incident in the Future

In the future, the use of bolted flanged couplings will be minimized or eliminated on piping being used to convey flowback water. Additionally, line inspections will be performed more frequently, especially at bolted flanged connections. When pumping is ceased between stages of water conveyance, all flanged connection integrity will be verified. If required, the connections will be tightened prior to commencement of pumping water through the piping for the next stage. Finally, if possible, spill containment kits will be located along the line where there are bolted connections.

If you have any questions, or require any additional information, please call me.

Very truly yours,

RANGE RESOURCES – APPALACHIA, LLC

A handwritten signature in black ink, reading "Carla L. Suszkowski". The signature is fluid and cursive, with the first name "Carla" being more prominent.

Carla L. Suszkowski, P.E.
Environmental Engineering Manager

Enclosures

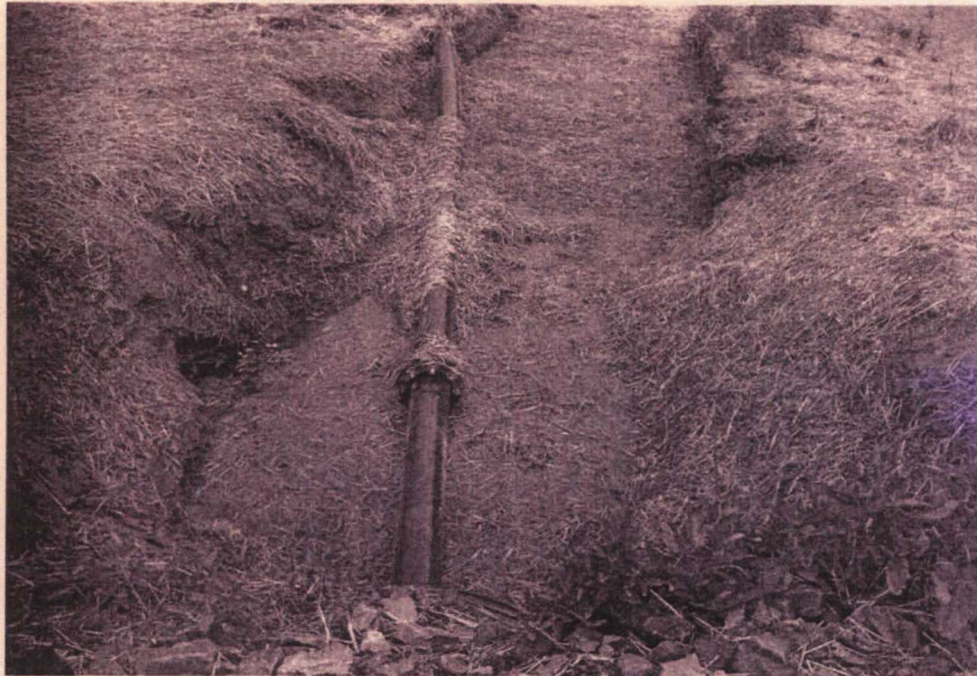


PHOTO #1

Coupling where loose bolts were found and leak occurred. Picture was taken after clean-up and water in low spot at pipe is fresh water.

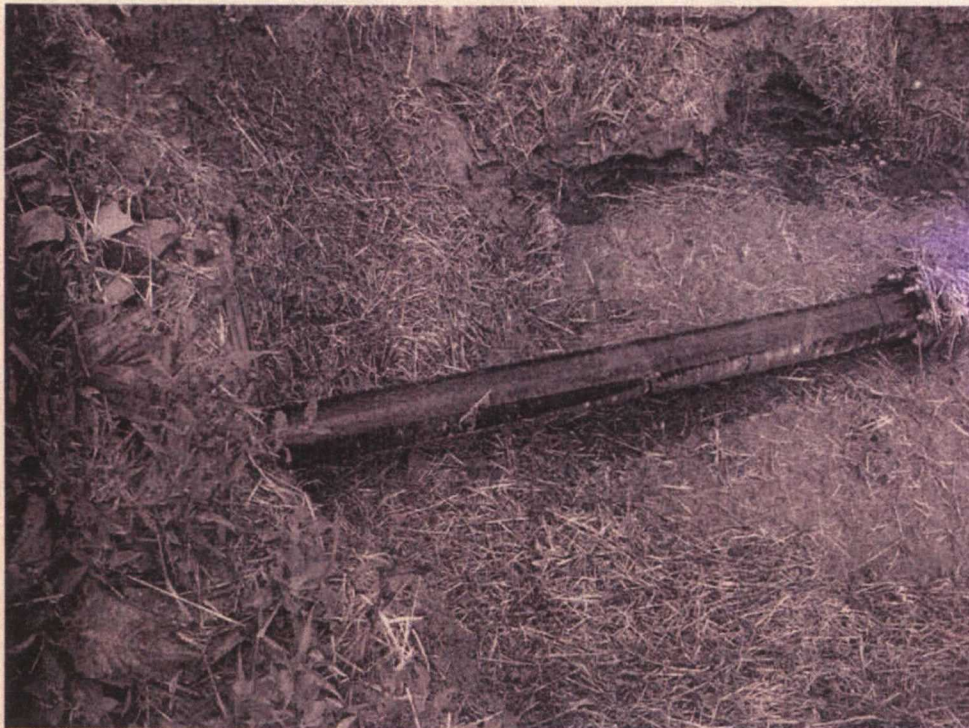


PHOTO #2

Coupling where loose bolts were found and leak occurred. Picture was taken after clean-up and water in low spot at pipe is fresh water.

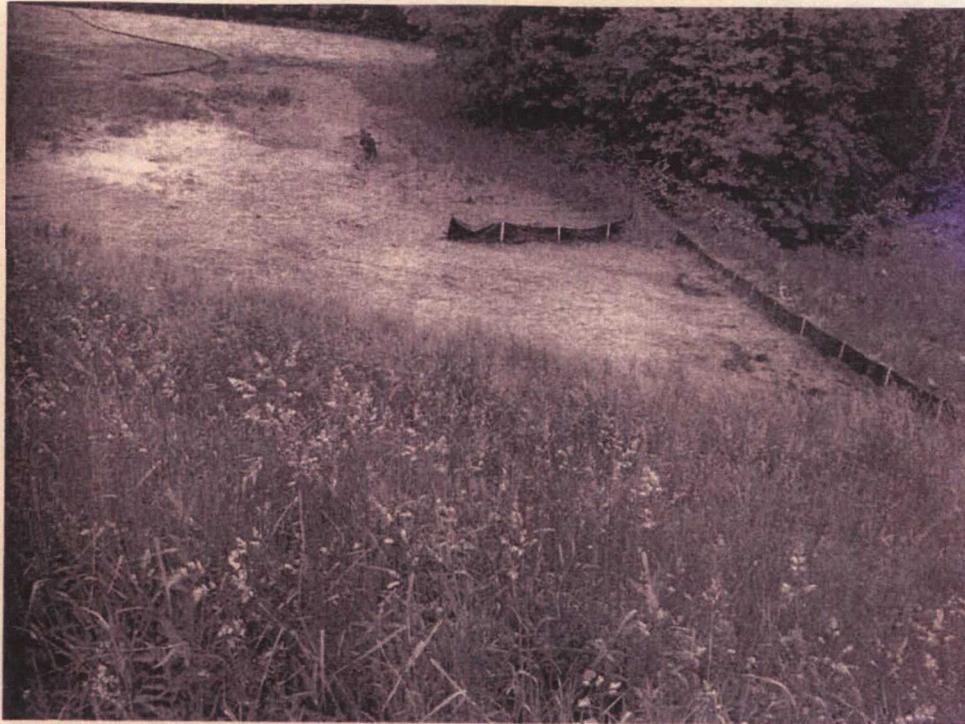


PHOTO #3

Down slope area affected by spill following clean-up and seeding and mulching



PHOTO #4

Down slope area affected by spill following clean-up and seeding and mulching